REMARKS/ARGUMENTS

Claims 1-28 are pending in the present application. Claims 1-6 and 8-28 have been amended herewith. Reconsideration of the claims is respectfully requested.

I. Claim Objections

The Examiner objected to Claims 5, 8, 16, 19 and 24 based on various informalities. Applicants have amended such claims as recommended by the Examiner. Therefore, the objection to the claims has been overcome.

II. 35 U.S.C. § 102, Anticipation

The Examiner rejected Claims 1-3, 6, 8, 12-14, 20-22, and 28 under 35 U.S.C. § 102 as being anticipated by Culbert et al. (U.S. PG-Pub No. 2005/0049729). This rejection is respectfully traversed.

Claim 1 has been amended to emphasize that the heat/power management of devices is with respect to devices configured in a logically partitioned data processing system, with dynamic changing of the logical configuration when the operation of physical devices are altered. While the cited Uchishiba reference, described below with respect to the 35 USC 103 rejection of Claims 4, 5, 9-11, 15-19 and 23-27, may describe a logical partitioned data processing system, such teachings do not contemplate an ability to selective disable or turn off a given physical processor in response to receiving an alarm indication, and then reconfiguring or changing the logical processor configuration to reflect a change in operation of the given physical processor. Similarly, the cited Culbert reference does not contemplate an ability to selective disable or turn off a given physical processor in response to receiving an alarm indication, and then reconfigure or change the logical processor configuration to reflect a change in operation of the given physical processor. Thus, it is urged that the amendment to Claim 1 has overcome the present 35 USC 102 rejection. Applicants further urge that Claim 1 is not obvious in view of Culbert and Uchishiba as such references do not contemplate an ability to selectively turn off a given physical processor and then reconfigure the logical processors without operating system intervention. Thus, it is further urged that, in addition to not being anticipated by Culbert, Claim 1 is not obvious in view of the Culbert/Uchishiba combination used in rejecting Claims 4, 5, 9-11, 15-19 and 23-27 (as further articulated below).

Applicants initially traverse the rejection of Claims 2, 3, 6, and 8 for reasons given above with respect to Claim 1 (of which Claims 2, 3, 6 and 8 depend upon).

Further with respect to Claim 2 (and dependent Claim 3), such claim has been amended in accordance with the embodiment described in Applicants' Specification at page 18, line 3 – page 19, line 11. It is urged that the cited reference does not teach or otherwise suggest such physical processor

allocation scheme, where a single physical processor is allocated to a plurality of logical processors, and therefore it is further urged that Claim 2 (and dependent Claim 3) is not anticipated by the cited reference.

Further with respect to Claim 6, such claim has been amended to recite that the operation of the selected physical processor is altered by an event handler using a sub-processor partitioning call. It is urged that the cited reference does not teach this claimed feature, and thus Claim 6 is not anticipated by the cited reference.

Applicants traverse the rejection of Claims 12-14, 20-22 and 28 for substantially the same reasons to those given above with respect to Claims 1-3.

Applicants further traverse the rejection of Claim 28 for similar reasons to those further reasons given above with respect to Claim 6.

Therefore, the rejection of Claims 1-3, 6, 8, 12-14, 20-22 and 28 under 35 U.S.C. § 102 has been overcome.

III. 35 U.S.C. § 103, Obviousness

The Examiner rejected Claims 4, 5, 9-11, 15-19 and 23-27 under 35 U.S.C. § 103 as being unpatentable over Culbert et al. and further in view of Uchishiba et al. (U.S. PG-Pub No. 2002/0016812). This rejection is respectfully traversed.

Applicants initially traverse the rejection of Claims 4 and 5 for similar reasons to those given above with respect to the missing claimed features identified above with respect to Claim 1. None of the cited references teach or otherwise suggest an ability to dynamically reconfigure the logical configuration of a logically-partitioned data processing system, without operating system intervention, in response to a change in the operating state of a physical processor due to a power/heat event.

Further with respect to Claim 4 (and dependent Claim 5), such claim has been amended to recite that the set of physical processors are mapped to an unequal set of logical processors. The teachings of the cited Uchishiba reference require a one-to-one mapping of a physical processor to a logical processor (Uchishiba Figure 7). The features of Claim 4 advantageously allow for a greater flexibility in physical to logical mappings, and therefore provide a greater flexibility when performing power/heat management via selective physical processor manipulation which affects such logical mappings. Therefore, it is further urged that Claim 4 (and dependent Claim 5) is not obvious in view of the cited references.

With respect to Claims 9-11 (and similarly for Claims 17-19 and 25-27), Applicants traverse the rejection of such claims for similar reasons to those given above with respect to the missing claimed features identified above with respect to Claim 1. None of the cited references teach or otherwise suggest an ability to dynamically reconfigure the logical configuration of a logically-partitioned data processing

system, without operating system intervention, in response to a change in the operating state of a physical processor due to a power/heat event.

Applicants traverse the rejection of Claims 15 and 16 (and similarly for Claims 23 and 24) for similar reasons to those given above with respect to Claims 4 and 5.

Therefore, the rejection of Claims 4, 5, 9-11, 15-19 and 23-27 under 35 U.S.C. § 103 has been overcome.

IV. 35 U.S.C. § 103, Obviousness

The Examiner rejected Claim 7 under 35 U.S.C. § 103 as being unpatentable over Culbert et al. and further in view of Madukkarumukumana et al. (U.S. PG-Pub No. 2005/0125580). This rejection is respectfully traversed for reasons given above with respect to Claim 1 (of which Claim 7 depends upon).

Further, it is urged that none of the cited references teach or suggestion *use of* a runtime abstraction layer to perform any operations (i.e. an altering step) that turn off a selected physical processor, as required by Claim 7 in combination with Claim 1. Therefore, a prima facie case of obviousness has not been established with respect to Claim 7 as there is at least one claimed feature not taught or suggested by any of the cited references[1].

Still further, a person of ordinary skill in the art, when confronted with the teachings of Culbert, would not have been motivated to modify such teachings in accordance with the claimed features recited in Claim 7 since Culbert expressly states a desire to use of an operating system and associated device drivers to perform device control in order to achieve greater control than what is available from a hardware based solution which has pre-determined flexibility (see, e.g., page 3, paragraph 0035; page 4, paragraph 0042; page 5, paragraph 0055)[2]. Thus, it is further urged that Claim 7 is not obvious in view of the cited references.

Therefore, the rejection of Claim 7 under 35 U.S.C. § 103 has been overcome.

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[1] To establish prima facie obviousness of a claimed invention, all of the claim limitations must be taught or suggested by the prior art. MPEP 2143.03 (emphasis added by Applicants). *See also, In re Royka*, 490 F.2d 580 (C.C.P.A. 1974). If the examiner fails to establish a prima facie case, the rejection is improper and will be overturned. *In re Fine*, 837 F.2d 1071, 1074, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988).

[2] The fact that a prior art device could be modified so as to produce the claimed device is not a basis for an obviousness rejection unless the prior art suggested the desirability of such a modification. *In re Gordon*, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984).

V. Conclusion

It is respectfully urged that the subject application is patentable over the cited references and is now in condition for allowance. The Examiner is invited to call the undersigned at the below-listed telephone number if in the opinion of the Examiner such a telephone conference would expedite or aid the prosecution and examination of this application.

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Respectfully submitted,

/Wayne P. Bailey/

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